

The Nesting Birds of the Roan Mountain Highlands

By Allan J. Trently

In northeast Tennessee there is a birder's paradise; it is called Roan Mountain.

It is a place where birders and ornithologists enjoy an immense diversity of nesting birds, check off life species, document new nesting records and make notes on new possible range extensions. To date, 188 species of birds have been recorded on or near the mountain many of which are known or thought to nest on the mountain.

Roan Mountain resides within Carter County, Tenn., and Mitchell County, N.C. At its highest altitude the mountain rises 6,285 feet above sea level. It is the 10th highest peak in Tennessee.



The Northern Saw-whet Owl reaches its southeastern breeding limit in the mountains of Tennessee and North Carolina.
Photo by Larry Masters

Plant communities change with elevation. Below 5,000 feet in elevation, the mountains consist of various deciduous forest communities mostly containing oaks and hickories. Above 5,000 feet is the northern hardwood forest community, which is predominantly Sugar Maples, Yellow Buckeye, and American Beech.

As you climb in elevation the northern hardwoods give way to the Red Spruce and Fraser Fir forest, grass and heath balds and other minor plant communities. The changes in plant communities reflect changes in bird communities. This article will focus mostly on the nesting birds above 5,000 feet in elevation on Roan Mountain.

High elevation grassy balds offer unique habitat for birds. Some birds found nesting in this habitat include Vesper Sparrow, Horned Lark, and Dark-eyed Junco. The Dark-eyed Junco is by far the most abundant nesting bird on Roan Mountain. I have found its nests within the grassy balds, on the edge of shrubby habitat and even within open areas in spruce-fir forests.

The Vesper Sparrow is an uncommon bird on Roan Mountain but is common on Big and Little Hump Mountains and Yellow Mountain Bald just north of Roan Mountain. The only confirmed nest record for the area that I am aware of is from Yellow Mountain Bald in Avery County, N.C. I located a nest in the grass containing three featherless nestlings on June 3, 2000.

Horned Larks were also present on the bald and it probably nests there. No Horned Larks have been present on Roan Mountain for many years, although historically, they have been known to nest on the mountain. There is a single breeding record from the mountain from the 1930s. Today, they are not to be found, probably because, with the recent absence of grazing, the vegetation there is too tall and dense.

Field Sparrows are rare from the high elevations of Roan Mountain. There are very few nesting records for field sparrows above 3,000 feet. On July 9, 2003, I located a Field Sparrow nest containing three eggs on Round Bald above Carver's Gap. The nesting location was approximately 5,600 feet. To my knowledge is this is the highest nesting elevation known for this species in the southeast.

Heath balds are dominated by shrubs; in particular, Catawba Rhododendron, green Alder, and blackberry. If you walk the Appalachian Trail over Round Bald to Grassy Ridge you will find this plant community growing onto the grassy balds especially at the edge-line of the spruce-fir and northern hardwood forest.

Common birds found nesting within these shrubs include Alder Flycatcher, Eastern Towhee, Gray Catbird, Chestnut Warbler, Common Yellowthroat, Canada Warbler, and occasionally American Robin. The Alder Flycatcher was not confirmed as a Tennessee nesting bird until 1978 when fledglings were located on Roan Mountain. Not only was this the first record for the state but also the southernmost breeding record for the species. Although they have been found nesting in other locations in East Tennessee, the Roan Mountain site is the most reliable site to find nesting birds.

A nest of an American Woodcock was discovered on Roan Mountain in 1942 under a rhododendron along the edge of grassy bald and shrub habitat. This breeding bird is typically overlooked since its breeding activities

take place at dawn and dusk. Very little is known about its nesting density on the mountain.

The Magnolia Warbler is a rare nesting bird on Roan Mountain. The earliest documentation of Magnolia Warblers on Roan Mountain is from 1959. Since then magnolias have been heard sporadically during the breeding season on the mountain. No nest records exist for this species in Tennessee, though in 2000 I located Magnolia Warbler fledglings on Unaka Mountain just south of Roan Mountain. To date, the only summer reports for this species in Tennessee are from Roan and Unaka Mountains.

The Mourning Warbler is not known to nest south of the highlands of West Virginia and northwest Virginia. Finding a Mourning Warbler during the breeding season south of these locations, especially as far south as Tennessee, is significant. I located a male Mourning Warbler on Roan Mountain during the summer in 2001 and 2002. No female, nest or young were ever found so nesting cannot be confirmed. My record is only the second summer record of this bird south of Virginia. The first was of a pair of Mourning Warblers along the Blue Ridge Parkway seen from 1983 to 1987. Breeding was not confirmed.

The northern hardwood and spruce-fir forests above 5,000 feet offer yet another important breeding bird area. Some common birds nesting in the high elevation forests in Tennessee include Northern Saw-whet Owl; Blue-headed Vireo; Brown Creeper; Golden-crowned Kinglet; Veery; Hermit Thrush; American Robin; Winter Wren; Red-breasted Nuthatch; Pine Siskin; and Red Crossbill.

The Northern Saw-whet Owl reaches its southeastern breeding limit in the mountains of Tennessee and North Carolina. Roan Mountain and the Smoky Mountains are two reliable areas in which to hear the saw-whets repetitive, alien sounding whistles emanating from the dark spruce-fir and tall shadowy northern hardwoods. From 1993 until 1995, East Tennessee State University graduate student Mark Barb placed 16 nest boxes on Roan Mountain, which produced five confirmed nests.

The Yellow-rumped Warbler, Hermit Thrush, Pine Siskin and Red Crossbill are four additional birds that find their southeastern most breeding limits in the Tennessee and North Carolina mountains. Birders John Gerwin and Rick Knight located a Yellow-rumped Warbler nest with two young on Roan Mountain in North Carolina in 1993. I found a nest of this species on Unaka Mountain in Tennessee in 2002. Unfortunately the nest was abandoned. During the four months time I spent on Roan Mountain during the breeding season, I observed Yellow-rumps only three times suggesting to me that this species is a rare breeder of our southern mountains.

The first documented nest of a Pine Siskin in Tennessee was made in 2007. During the Roan Mountain Spring Naturalist's Rally I ventured up the Roan on a foggy, rainy day. In the dense fog, I saw a Pine Siskin frequently returning to a non-native spruce tree. The fog obscured what the bird was doing. The next day, while participating in a rally sponsored birding trip, I watched the siskin weaving plant material into a half-formed nest in that same spruce.

No nest of the Red Crossbill has ever been found in Tennessee though adults have been observed feeding young in the spruce-fir forests in the Great Smoky Mountains National Park. I observed this species regularly on Roan Mountain between 2000 and 2003 but only once witnessed a bird singing from a perch. Though I followed this bird in hopes of finding a nest, I was never successful in that endeavor.

Red Crossbills are interesting since they may breed during any month of the year as long as there is an adequate mature pine cone crop available; though a recent study suggests that breeding stops when autumn day length becomes shorter than about 12 hours. In the southeast United States, breeding records extend from February through October. Most nesting in the Southern Appalachian Mountains occurs during two periods, from late winter to early spring in most coniferous forests.

Brown Creepers are known to nest under the peeling bark of a dead spruce or fir tree. I located a nest in a dead Fraser Fir above Carver's Gap on July 20, 2000. Adults were observed going to the nest repeatedly with food. Each time the adults would enter the nest I would hear loud chirping notes of the young. On August 10th I watched an adult creeper feeding recently fledged young near the nest site. This August 10th date extends the previously recorded late fledgling date in Tennessee of July 31 by about 10 days.

A wealth of knowledge on the breeding birds of Roan Mountain can be found within the pages of The Tennessee Ornithological Society journal, *The Migrant*. For an in-depth study of the breeding birds of all of Tennessee, including Roan Mountain, check out the *Atlas of the Breeding Birds of Tennessee* by Charles Nicholson, published by the University of Tennessee Press, Knoxville, 1997.

The Friends of Roan Mountain's Web site www.etsu.edu/biology/roan-mtn gives a complete list of birds observed on Roan Mountain with a bibliography.

For an in depth perspective of research on Roan Mountain, including information on bird research read, "Research on The Roan" by Jennifer A. Bauer in The Tennessee Conservationist, November/December, 2002.

The Southern Appalachian Highlands Conservancy allowed me the opportunity to study the birds of Roan Mountain. They offer their continued support of the natural and cultural beauty of the Roan Mountain Massif. For information on the Southern Appalachian Highlands Conservancy go to the Web site www.appalachian.org.

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